
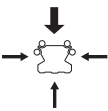
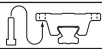




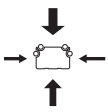





Selecting a Type

Types of LM Guides


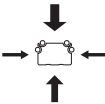



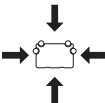



THK offers a wide array of types and dimensions with LM Guides as standard so that you can select the optimal product for any application. With the unit structure of each model, you can easily obtain high running accuracy with no clearance simply by mounting the product on a plane surface with bolts. We have a proven track record and know-how in extensive applications with LM Guides.

Classification		Type		Specification Table	Load capacity diagram	Basic load rating (kN)	
						Basic dynamic load rating	Basic static load rating
Radial type	Caged Ball LM Guide		SSR-XW	▶ A1-110		14.7 to 64.6	16.5 to 71.6
			SSR-XV	▶ A1-112		9.1 to 21.7	9.7 to 22.5
			SSR-XTB	▶ A1-114		14.7 to 31.5	16.5 to 36.4
	Full-Complement Ball LM Guides		SR-W	▶ A1-212		13.8 to 411	20.5 to 537
			SR-M1W	▶ A1-356		13.8 to 60.4	20.5 to 81.8
			SR-V	▶ A1-212		9.1 to 40.9	11.7 to 46.7
			SR-M1V	▶ A1-356		9.1 to 40.9	11.7 to 46.7
			SR-TB	▶ A1-214		13.8 to 136	20.5 to 179
			SR-M1TB	▶ A1-358		13.8 to 60.4	20.5 to 81.8
			SR-SB	▶ A1-214		9.1 to 40.9	11.7 to 46.7
			SR-M1SB	▶ A1-358	9.1 to 40.9	11.7 to 46.7	
	Oil-Free LM Guides for Special Environments		SR-MSV	▶ A1-390	—	—	
			SR-MSW	▶ A1-390	—	—	
	Caged Ball LM Guides for Machine Tools high-rigidity model for ultra-heavy loads		SVR-C	▶ A1-128		48 to 260	68 to 328
			SVR-LC	▶ A1-128		57 to 340	86 to 481
			SVR-R	▶ A1-124		48 to 260	68 to 328
			SVR-LR	▶ A1-124		57 to 340	86 to 481
			SVR-CH	▶ A1-134		90 to 177	115 to 238
			SVR-LCH	▶ A1-134		108 to 214	159 to 312
			SVR-RH	▶ A1-132		90 to 177	115 to 238
SVR-LRH			▶ A1-132	108 to 214		159 to 312	

Point of Selection

Selecting a Type


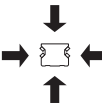





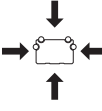



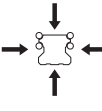

	External dimensions (mm)		Features	Major application
	Height	Width		
	24 to 48	34 to 70	<ul style="list-style-type: none"> Long service life, long-term maintenance-free operation Low dust generation, low noise, acceptable running sound Superbly high speed Smooth motion in all mounting orientations Thin, compact design, large radial load capacity Superb in planar running accuracy Superb capability of absorbing mounting error Stainless steel type also available as standard 	<ul style="list-style-type: none"> Surface grinder table Tool grinder table Electric discharge machine Printed circuit board drilling machine Chip mounter High-speed transfer equipment Traveling unit of robots Machining center NC lathe Five axis milling machine Conveyance system Mold guide of pressing machines Inspection equipment Testing machine Food-related machine Medical equipment 3D measuring instrument Packaging machine Injection molding machine Woodworking machine Ultra precision table Semiconductor/liquid crystal manufacturing equipment
	24 to 33	34 to 48		
	24 to 33	52 to 73		
	24 to 135	34 to 250		
	24 to 48	34 to 70		
	24 to 48	34 to 70		
	24 to 48	34 to 70		
	24 to 48	34 to 70		
	24 to 68	52 to 140		
	24 to 48	52 to 100		
	24 to 48	52 to 100	<ul style="list-style-type: none"> Thin, compact design, large radial load capacity Superb in planar running accuracy Superb capability of absorbing mounting error Stainless steel type also available as standard Type M1, achieving max service temperature of 150°C, also available 	<ul style="list-style-type: none"> Photolithography machine Organic EL display manufacturing machine Ion implantation equipment
	24 to 28	34 to 42		
	24 to 28	34 to 42	<ul style="list-style-type: none"> Minimum generation of outgases (water, organic matter) Small amount of particles generated Can be used at high temperature (up to 150°C) 	
	31 to 75	72 to 170	<ul style="list-style-type: none"> Long service life, long-term maintenance-free operation Low dust generation, low noise, acceptable running sound Superbly high speed Smooth motion in all mounting orientations Ultra-heavy load capacity optimal for machine tools Thin, compact design, large radial load capacity High vibration resistance and impact resistance due to improved damping characteristics Superb in planar running accuracy 	<ul style="list-style-type: none"> Machining center NC lathe Grinding machine Five axis milling machine Jig borer Drilling machine NC milling machine Horizontal milling machine Mold processing machine Graphite working machine Electric discharge machine Wire-cut electric discharge machine
	31 to 75	72 to 170		
	31 to 75	50 to 126		
	31 to 75	50 to 126		
	48 to 70	100 to 140	<ul style="list-style-type: none"> Long service life, long-term maintenance-free operation Low dust generation, low noise, acceptable running sound Superbly high speed Smooth motion in all mounting orientations Ultra-heavy load capacity optimal for machine tools Large radial load capacity High vibration resistance and impact resistance due to improved damping characteristics Superb in planar running accuracy Has dimensions almost the same as that of the full-ball type LM Guide model HSR, which is practically a global standard size 	<ul style="list-style-type: none"> Horizontal milling machine Mold processing machine Graphite working machine Electric discharge machine Wire-cut electric discharge machine
	48 to 70	100 to 140		
	55 to 80	70 to 100		
	55 to 80	70 to 100		

Classification		Type		Specification Table	Load capacity diagram	Basic load rating (kN)	
						Basic dynamic load rating	Basic static load rating
Radial Type	Full-Complement Ball LM Guides for Machine Tools high-rigidity model for ultra-heavy loads		NR-A	▶A1-228		33 to 479	84.6 to 1040
			NR-LA	▶A1-228		44 to 599	113 to 1300
			NR-B	▶A1-232		33 to 479	84.6 to 1040
			NR-LB	▶A1-232		44 to 599	113 to 1300
			NR-R	▶A1-224		33 to 479	84.6 to 1040
			NR-LR	▶A1-224		44 to 599	113 to 1300
4-way type	Caged Ball LM Guides for Machine Tools high-rigidity model for ultra-heavy loads		SVS-C	▶A1-130		37 to 199	52 to 251
			SVS-LC	▶A1-130		44 to 261	66 to 368
			SVS-R	▶A1-126		37 to 199	52 to 251
			SVS-LR	▶A1-126		44 to 261	66 to 368
			SVS-CH	▶A1-134		69 to 136	88 to 182
			SVS-LCH	▶A1-134		83 to 164	122 to 239
			SVS-RH	▶A1-132		69 to 136	88 to 182
			SVS-LRH	▶A1-132		83 to 164	122 to 239

Point of Selection

Selecting a Type


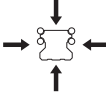




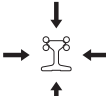


External dimensions (mm)		Features	Major application
Height	Width		
31 to 105	72 to 260	<ul style="list-style-type: none"> • Ultra-heavy load capacity optimal for machine tools • High vibration resistance and impact resistance due to improved damping characteristics • Thin, compact design, large radial load capacity • Superb in planar running accuracy 	<ul style="list-style-type: none"> • Machining center • NC lathe • Grinding machine • Five axis milling machine • Jig borer • Drilling machine • NC milling machine • Horizontal milling machine • Mold processing machine • Graphite working machine • Electric discharge machine • Wire-cut electric discharge machine
31 to 105	72 to 260		
31 to 105	72 to 260		
31 to 105	72 to 260		
31 to 105	50 to 200		
31 to 105	50 to 200		
31 to 75	72 to 170	<ul style="list-style-type: none"> • Long service life, long-term maintenance-free operation • Low dust generation, low noise, acceptable running sound • Superbly high speed • Smooth motion in all mounting orientations • Ultra-heavy load capacity optimal for machine tools • Low profile, compact 4-way type • High vibration resistance and impact resistance due to improved damping characteristics 	
31 to 75	72 to 170		
31 to 75	50 to 126		
31 to 75	50 to 126		
48 to 70	100 to 140	<ul style="list-style-type: none"> • Long service life, long-term maintenance-free operation • Low dust generation, low noise, acceptable running sound • Superbly high speed • Smooth motion in all mounting orientations • Ultra-heavy load capacity optimal for machine tools • 4-way type • High vibration resistance and impact resistance due to improved damping characteristics • Has dimensions almost the same as that of the full-ball type LM Guide model HSR, which is practically a global standard size 	
48 to 70	100 to 140		
55 to 80	70 to 100		
55 to 80	70 to 100		

Classification		Type		Specification Table	Load capacity diagram	Basic load rating (kN)	
						Basic dynamic load rating	Basic static load rating
4-way equal load type	Caged Roller LM Guide - super ultra-heavy-load, high rigidity types		SRG-A, C	▶A1-404		11.3 to 131	25.8 to 266
			SRG-LA, LC	▶A1-404		26.7 to 278	63.8 to 599
			SRG-R, V	▶A1-410		11.3 to 131	25.8 to 266
			SRG-LR, LV	▶A1-410		26.7 to 601	63.8 to 1170
			SRN-C	▶A1-422		59.1 to 131	119 to 266
			SRN-LC	▶A1-422		76 to 278	165 to 599
			SRN-R	▶A1-424		59.1 to 131	119 to 266
			SRN-LR	▶A1-424		76 to 278	165 to 599
		SRW-LR	▶A1-432	115 to 601	256 to 1170		
	Full-Complement LM Guides for Machine Tools high-rigidity model for ultra-heavy loads		NRS-A	▶A1-230		25.9 to 376	59.8 to 737
			NRS-LA	▶A1-230		34.5 to 470	79.7 to 920
			NRS-B	▶A1-234		25.9 to 376	59.8 to 737
			NRS-LB	▶A1-234		34.5 to 470	79.7 to 920
			NRS-R	▶A1-226		25.9 to 376	59.8 to 737
			NRS-LR	▶A1-226		34.5 to 470	79.7 to 920
	Caged Ball LM Guide - heavy-load, high rigidity types		SHS-C	▶A1-98		14.2 to 205	24.2 to 320
			SHS-LC	▶A1-98		17.2 to 253	31.9 to 408
			SHS-V	▶A1-100		14.2 to 205	24.2 to 320
			SHS-LV	▶A1-100		17.2 to 253	31.9 to 408
			SHS-R	▶A1-102		14.2 to 128	24.2 to 197
SHS-LR			▶A1-102	36.8 to 161		64.7 to 259	

Point of Selection

Selecting a Type


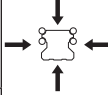
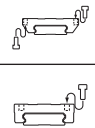
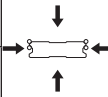
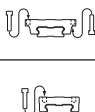

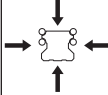

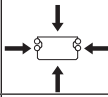
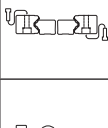
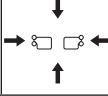



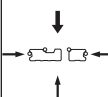
External dimensions (mm)		Features	Major application
Height	Width		
24 to 70	47 to 140	<ul style="list-style-type: none"> • Long service life, long-term maintenance-free operation • Low noise, acceptable running sound • Superbly high speed • Smooth motion due to prevention of rollers from skewing • Ultra-heavy load capacity optimal for machine tools 	<ul style="list-style-type: none"> • Machining center • NC lathe • Grinding machine • Five axis milling machine • Jig borer • Drilling machine • NC milling machine • Horizontal milling machine • Mold processing machine • Graphite working machine • Electric discharge machine • Wire-cut electric discharge machine
30 to 120	63 to 250		
24 to 80	34 to 100		
30 to 90	44 to 126		
44 to 63	100 to 140	<ul style="list-style-type: none"> • Long service life, long-term maintenance-free operation • Low noise, acceptable running sound • Superbly high speed • Smooth motion due to prevention of rollers from skewing • Ultra-heavy load capacity optimal for machine tools • Low center of gravity, ultra-high rigidity 	
44 to 75	100 to 170		
44 to 63	70 to 100		
44 to 75	70 to 126		
70 to 150	135 to 300		
31 to 105	72 to 260	<ul style="list-style-type: none"> • Ultra-heavy load capacity optimal for machine tools • High vibration resistance and impact resistance due to improved damping characteristics • Low-Profile compact design, 4-way equal load 	
31 to 105	72 to 260		
31 to 105	72 to 260		
31 to 105	72 to 260		
31 to 105	50 to 200		
31 to 105	50 to 200		
24 to 90	47 to 170	<ul style="list-style-type: none"> • Long service life, long-term maintenance-free operation • Low dust generation, low noise, acceptable running sound • Superbly high speed • Smooth motion in all mounting orientations • Heavy load, high rigidity • Has dimensions almost the same as that of the full-ball type LM Guide model HSR, which is practically a global standard size • Superb capability of absorbing mounting error 	<ul style="list-style-type: none"> • Machining center • NC lathe • XYZ axes of heavy cutting machine tools • Grinding head feeding axis of grinding machines • Components requiring a heavy moment and high accuracy • NC milling machine • Horizontal milling machine • Gantry five axis milling machine • Z axis of electric discharge machines • Wire-cut electric discharge machine • Car elevator • Food-related machine • Testing machine • Vehicle doors • Printed circuit board drilling machine • ATC • Construction equipment • Shield machine • Semiconductor/liquid crystal manufacturing equipment
24 to 90	47 to 170		
24 to 90	34 to 126		
24 to 90	34 to 126		
28 to 80	34 to 100		
28 to 80	34 to 100		

Classification		Type		Specification Table	Load capacity diagram	Basic load rating (kN)	
						Basic dynamic load rating	Basic static load rating
4-way equal load type	Full-Complement Ball LM Guide - heavy-load, high rigidity types		HSR-A	▶A1-186		10.9 to 304	15.7 to 355
			HSR-M1A	▶A1-342		10.9 to 53.9	15.7 to 70.2
			HSR-LA	▶A1-186		23.9 to 367	35.8 to 464
			HSR-M1LA	▶A1-342		23.9 to 65	35.8 to 91.7
			HSR-CA	▶A1-196		19.8 to 304	27.4 to 355
			HSR-HA	▶A1-196		23.9 to 518	35.8 to 728
			HSR-B	▶A1-188		10.9 to 304	15.7 to 355
			HSR-M1B	▶A1-344		10.9 to 53.9	15.7 to 70.2
			HSR-LB	▶A1-188		23.9 to 367	35.8 to 464
			HSR-M1LB	▶A1-344		23.9 to 65	35.8 to 91.7
			HSR-CB	▶A1-198		19.8 to 304	27.4 to 355
			HSR-HB	▶A1-198		23.9 to 518	35.8 to 728
			HSR-R	▶A1-192		1.08 to 304	2.16 to 355
			HSR-M1R	▶A1-346		10.9 to 53.9	15.7 to 70.2
			HSR-LR	▶A1-192		23.9 to 367	35.8 to 464
			HSR-M1LR	▶A1-346		23.9 to 65	35.8 to 91.7
			HSR-HR	▶A1-200		441 to 518	540 to 728
		LM Guide for Medium-to-Low Vacuum		HSR-M1VV		▶A1-382	10.9
	Full-ball LM Guide - side mount types		HSR-YR	▶A1-194	10.9 to 195	15.7 to 228	
			HSR-M1YR	▶A1-348	10.9 to 53.9	15.7 to 70.2	
	Full-Complement LM Guides - special LM rail types		JR-A	▶A1-310		27.6 to 121	36.4 to 146
			JR-B	▶A1-310		27.6 to 121	36.4 to 146
			JR-R	▶A1-310		27.6 to 121	36.4 to 146

Point of Selection

Selecting a Type


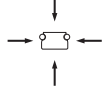
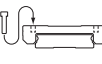

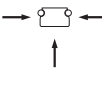

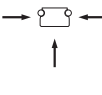


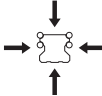

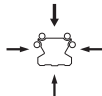
External dimensions (mm)		Features	Major application
Height	Width		
24 to 110	47 to 215	<ul style="list-style-type: none"> • Heavy load, high rigidity • Practically a global standard size • Superb capability of absorbing mounting error • Stainless steel type also available as standard • Type M1, achieving max service temperature of 150°C, also available • Type M2, with high corrosion resistance, also available (Basic dynamic load rating: 2.33 to 5.57 kN) (Basic static load rating: 2.03 to 5.16 kN) 	<ul style="list-style-type: none"> • Machining center • NC lathe • XYZ axes of heavy cutting machine tools • Grinding head feeding axis of grinding machines • Components requiring a heavy moment and high accuracy • NC milling machine • Horizontal milling machine • Gantry five axis milling machine • Z axis of electric discharge machines • Wire-cut electric discharge machine • Car elevator • Food-related machine • Testing machine • Vehicle doors • Printed circuit board drilling machine • ATC • Construction equipment • Shield machine • Semiconductor/liquid crystal manufacturing equipment
24 to 48	47 to 100		
30 to 110	63 to 215		
30 to 48	63 to 100		
30 to 110	63 to 215		
30 to 145	63 to 350		
24 to 110	47 to 215		
24 to 48	47 to 100		
30 to 110	63 to 215		
30 to 48	63 to 100		
30 to 110	63 to 215		
30 to 145	63 to 350		
11 to 110	16 to 156		
28 to 55	34 to 70		
30 to 110	44 to 156		
30 to 55	44 to 70		
120 to 145	250 to 266		
28	34	<ul style="list-style-type: none"> • Can be used in various environments at atmospheric pressure to vacuum (10^{-3} [Pa]) • Allows baking temperature of 200°C* at a maximum * If the baking temperature exceeds 100°C, multiply the basic load rating with the temperature coefficient. 	<ul style="list-style-type: none"> • Medical equipment • Semiconductor/liquid crystal manufacturing equipment
28 to 90	33.5 to 124.5	<ul style="list-style-type: none"> • Easy mounting and reduced mounting height when using 2 units opposed to each other since the side faces of the LM block have mounting holes • Heavy load, high rigidity • Superb capability of absorbing mounting error • Stainless steel type also available as standard • Type M1, achieving max service temperature of 150°C, also available 	<ul style="list-style-type: none"> • Cross rails of gantry machine tools • Z axis of woodworking machines • Z axis of measuring instruments • Components opposed to each other
28 to 55	33.5 to 69.5		
61 to 114	70 to 140	<ul style="list-style-type: none"> • Since the central part of the LM rail is thinly structured, the LM Guide is capable of absorbing an error and achieving smooth motion if the parallelism between the two axes is poor • Since the LM rail has a highly rigid sectional shape, it can be used as a structural member 	<ul style="list-style-type: none"> • Automated warehouse • Garage • Gantry robot • FMS traveling rail • Lift • Conveyance system • Welding machine • Lifter • Crane • Forklift • Coating machine • Shield machine • Stage setting
61 to 114	70 to 140		
65 to 124	48 to 100		

Classification		Type		Specification Table	Load capacity diagram	Basic load rating (kN)	
						Basic dynamic load rating	Basic static load rating
4-way equal load type	Caged Ball Cross LM Guide		SCR	▶ A1-168		36.8 to 253	64.7 to 408
	Full-Complement LM Guide orthogonal type		CSR	▶ A1-296		10.9 to 100	15.7 to 135
	Caged Ball LM Guide - wide, low center of gravity types		SHW-CA	▶ A1-142		4.31 to 70.2	5.66 to 91.4
			SHW-CR, HR	▶ A1-144		4.31 to 70.2	5.66 to 91.4
	Full-Complement Ball LM Guide - wide, low center of gravity types		HRW-CA	▶ A1-242		5.53 to 80.3	9.1 to 109
			HRW-CR, LRM	▶ A1-244		3.29 to 62.4	7.16 to 86.3
	Full-ball Straight - Curved Guide		HMG	▶ A1-326		2.56 to 66.2	Straight section 4.23 to 66.7 Curved section 0.44 to 36.2
	Caged Ball LM Guides Finite stroke		EPF	▶ A1-176		0.90 to 3.71	1.60 to 5.88
Interchangeable designs	Full-Complement Ball LM Guide - separate types		HR, HR-T	▶ A1-264		2.82 to 226	3.48 to 232
			GSR-T	▶ A1-276		8.42 to 37	9.77 to 39.1
	Full-Complement Ball LM Guides - LM rail-rack intergrated type		GSR-V	▶ A1-276		6.51 to 15.5	6.77 to 15.2
			GSR-R	▶ A1-284		15.5 to 37	15.2 to 39.1

Point of Selection

Selecting a Type

External dimensions (mm)		Features	Major application	
Height	Width			
70 to 180	88 to 226	<ul style="list-style-type: none"> • A compact XY structure is allowed due to an XY orthogonal, single-piece LM block • Since a saddle-less structure is allowed, the machine can be lightweighted and compactly designed • Long service life, long-term maintenance-free operation • Low dust generation, low noise, acceptable running sound • Superbly high speed 	<ul style="list-style-type: none"> • Low center of gravity, precision XY table • NC lathe • Optical measuring instrument • Automatic lathe • Inspection equipment • Cartesian coordinate robot • Bonding machine 	<ul style="list-style-type: none"> • Wire-cut electric discharge machine • Hollow table • Printed circuit board assembler • Machine tool table • Electric discharge machine • XY axes of horizontal machining center
47 to 118	38.8 to 129.8	<ul style="list-style-type: none"> • A compact XY structure is allowed due to an XY orthogonal, single-piece LM block • Since a saddle-less structure is allowed, the machine can be lightweighted and compactly designed 		
12 to 50	40 to 162	<ul style="list-style-type: none"> • Long service life, long-term maintenance-free operation • Low dust generation, low noise, acceptable running sound • Superbly high speed • Smooth motion in all mounting orientations • Wide, low center of gravity, space saving structure • Stainless steel type also available as standard 	<ul style="list-style-type: none"> • Z axis of IC printed circuit board drilling machine • Z axis of small electric discharge machine • Loader • Machining center • NC lathe • Robot • Wire-cut electric discharge machine 	<ul style="list-style-type: none"> • APC • Semiconductor/liquid crystal manufacturing equipment • Measuring instrument • Wafer transfer equipment • Construction equipment • Railroad vehicle
12 to 50	30 to 130			
17 to 60	60 to 200	<ul style="list-style-type: none"> • 4-way equal load, thin and highly rigid • Wide, low center of gravity, space saving structure • Stainless steel type also available as standard 		
12 to 50	30 to 130			
24 to 90	47 to 170	<ul style="list-style-type: none"> • Freedom of design • Cost reduction through simplified structure 	<ul style="list-style-type: none"> • Large swivel base • Pendulum vehicle for railroad • Pantagraph • Control unit • Optical measuring machine • Tool grinder • X-Ray machine 	<ul style="list-style-type: none"> • CT scanner • Medical equipment • Stage setting • Car elevator • Amusement machine • Turntable • Tool changer
8 to 16	17 to 32	<ul style="list-style-type: none"> • Caged ball effect using a cage • Smooth movement with minimal rolling variation • 4-groove construction in a compact body 	<ul style="list-style-type: none"> • Semiconductor manufacturing equipment • Medical equipment • Inspection equipment • Industrial machinery 	
8.5 to 60	18 to 125	<ul style="list-style-type: none"> • Low-Profile high rigidity, space saving structure • Interchangeable with Cross-Roller Guide • Preload can be adjusted • Stainless steel type also available as standard 	<ul style="list-style-type: none"> • XYZ axes of electric discharge machine • Precision table • XZ axes of NC lathe • Assembly robot • Conveyance system 	<ul style="list-style-type: none"> • Machining center • Wire-cut electric discharge machine • Tool changer • Woodworking machine
20 to 38	32 to 68	<ul style="list-style-type: none"> • LM block and LM rail are both interchangeable • Preload can be adjusted • Capable of absorbing vertical level error and horizontal tolerance for parallelism 		
20 to 30	32 to 50		<ul style="list-style-type: none"> • Industrial robot • Various conveyance systems • Automated warehouse • Palette changer • ATC • Door closing device 	<ul style="list-style-type: none"> • Guide using an aluminum mold base • Welding machine • Coating machine • Car washing machine
30 to 38	59.91 to 80.18	<ul style="list-style-type: none"> • LM rail-rack integrated design eliminates assembly and adjustment work • LM rail-rack integrated design enables a space-saving structure to be achieved • Capable of supporting long strokes 		

Classification		Type		Specification Table	Load capacity diagram	Basic load rating (kN)	
						Basic dynamic load rating	Basic static load rating
Miniature types	Caged Ball LM Guides		SRS-S	▶ A1-158		1.09 to 4.5	0.964 to 3.39
			SRS-M			0.439 to 16.5	0.468 to 20.2
			SRS-N			0.515 to 9.71	0.586 to 8.55
			SRS-WS	▶ A1-160		1.38 to 6.64	1.35 to 5.94
			SRS-WM			0.584 to 9.12	0.703 to 8.55
			SRS-WN			0.746 to 12.4	0.996 to 12.1
	Full-Complement Ball LM Guides		RSR-M	▶ A1-254		0.18 to 8.82	0.27 to 12.7
			RSR-M1V	▶ A1-366		1.47 to 8.82	2.25 to 12.7
			RSR-N	▶ A1-254		0.3 to 14.2	0.44 to 20.6
			RSR-M1N	▶ A1-366		2.6 to 14.2	3.96 to 20.6
	Full-Complement Ball LM Guide - wide types		RSR-WM/WV	▶ A1-254		0.25 to 6.66	0.47 to 9.8
			RSR-M1WV	▶ A1-368		2.45 to 6.66	3.92 to 9.8
			RSR-WN	▶ A1-254		0.39 to 9.91	0.75 to 14.9
			RSR-M1WN	▶ A1-368		3.52 to 9.91	5.37 to 14.9
Full Complement Ball LM Guide - orthogonal type		MX	▶ A1-302		0.59 to 2.04	1.1 to 3.21	
Circular arc types	Full-Complement Ball LM Guides		HCR	▶ A1-318		4.7 to 141	8.53 to 215
Self-aligning types	Full-Complement Ball LM Guides		NSR-TBC	▶ A1-332		9.41 to 90.8	18.6 to 152

External dimensions (mm)		Features	Major application
Height	Width		
8 to 16	17 to 32	<ul style="list-style-type: none"> • Long service life, long-term maintenance-free operation • Low dust generation, low noise, acceptable running sound • Superbly high speed • Smooth motion in all mounting orientations • Stainless steel type also available as standard • Lightweight and compact 	<ul style="list-style-type: none"> • IC/LSI manufacturing machine • Hard disc drive • Slide unit of OA equipment • Wafer transfer equipment • Printed circuit board assembly table • Medical equipment • Electronic components of electron microscope • Optical stage • Stepper • Plotting machine • Feed mechanism of IC bonding machine • Inspection equipment
6 to 25	17 to 48		
6 to 16	12 to 32		
9 to 16	25 to 60		
6.5 to 16	17 to 60		
4 to 25	8 to 46	<ul style="list-style-type: none"> • Stainless steel type also available as standard • Long type with increased load capacity also offered as standard • Type M1, achieving max service temperature of 150°C, also available 	<ul style="list-style-type: none"> • IC/LSI manufacturing machine • Hard disc drive • Slide unit of OA equipment • Wafer transfer equipment • Printed circuit board assembly table • Medical equipment • Electronic components of electron microscope • Optical stage • Stepper • Plotting machine • Feed mechanism of IC bonding machine • Inspection equipment
10 to 25	20 to 46		
4 to 25	8 to 46		
10 to 25	20 to 46		
4.5 to 16	12 to 60	<ul style="list-style-type: none"> • Stainless steel type also available as standard • Long type with increased load capacity also offered as standard • Type M1, achieving max service temperature of 150°C, also available 	<ul style="list-style-type: none"> • Optical stage • Stepper • Plotting machine • Feed mechanism of IC bonding machine • Inspection equipment
12 to 16	30 to 60		
4.5 to 16	12 to 60		
12 to 16	30 to 60		
10 to 14.5	15.2 to 30.2	<ul style="list-style-type: none"> • A compact XY structure is allowed due to an XY orthogonal, single-piece LM block • Stainless steel type also available as standard 	<ul style="list-style-type: none"> • IC/LSI manufacturing machine • Inspection equipment • Slide unit of OA equipment • Wafer transfer equipment • Feed mechanism of IC bonding machine • Printed circuit board assembly table • Medical equipment • Electronic components of electron microscope • Optical stage
18 to 90	39 to 170	<ul style="list-style-type: none"> • Circular motion guide in a 4-way equal load design • Highly accurate circular motion without play • Allows an efficient design with the LM block placed in the loading point • Large circular motion easily achieved 	<ul style="list-style-type: none"> • Large swivel base • Pendulum vehicle for railroad • Pantagraph • Control unit • Optical measuring machine • Tool grinder • X-Ray machine • CT scanner • Medical equipment • Stage setting • Car elevator • Amusement machine • Turntable • Tool changer
40 to 105	70 to 175	<ul style="list-style-type: none"> • Can be used in rough mount due to self-aligning on the fit surface of the case • Preload can be adjusted • Can be mounted on a black steel sheet 	<ul style="list-style-type: none"> • XY axes of ordinary industrial machinery • Various conveyance systems • Automated warehouse • Palette changer • Automatic coating machine • Various welding machines

